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THE ACHIEVEMENTS AND SHORTCOMINGS OF THE AMERICAN COLLEGE¹

J. McKEEN CATTELL
Columbia University

The free elective system, three years of college in preparation for the professional school, personal freedom for the student, these are tenets that Harvard has made familiar to us all. But the pendulum now swings backward. It is already decided that the work of the student is to be concentrated and dispersed by faculty decree; that preparatory schools are to be established for freshmen. We are told that the four-year college course should not be shortened, that "every college graduate ought to be equipped to enter any professional school," and that "the professional schools ought to be so ordered that they are adapted to receive him." "College students are amateurs, not professionals"; they should study "a little of everything," and though each should also have "a firm grasp of some subject," it should lie "outside of his vocation." "The college may be regarded as the last period of play."

The scheme on which the president, fellows, overseers, and faculty of arts and sciences of Harvard University have united has one merit; they announce that it will not be enforced. Compulsory concentration is useless and compulsory dispersion is bad. Neither good students, nor those who do not want to study will

¹ Read at the Nineteenth Annual Meeting of the Harvard Teachers' Association, Harvard University, March, 1910.

be helped. Any such scheme breaks down under the load of its artificiality. The field of knowledge is divided into four divisions for purposes of dispersion, but no faculty can put asunder what God has joined together. According to his interests and needs the student may find his concentration scattered through the four divisions and his dispersion within a single department, as well as the reverse. In my own subject he can find boundless dispersion—witness the fields tilled at Harvard by Professors James, Münsterberg, Royce, Palmer, Santayana, and Yerkes—or he can choose a unified and consistent course by innumerable combinations of studies.

Ten years ago a committee from the Harvard Department of Education made a detailed study of the programs of study of 372 members of the class of 1901. It was concluded that only 7.8 per cent appeared open to the charge of undue specialization, of whom one-third specialized in history and political science preparatory to the study of law. Only $4\frac{1}{2}$ per cent seemed to show a lack of proper concentration of energy, and of these one-sixth received the A.B. *magna cum laude*. But circumstances alter cases. We are now told that more than half the students concentrate too much or too little. It is said that only one-seventh of the students graduating from the law school *cum laude* concentrated too little in college, whereas the medical students did not concentrate nearly so much. It is not likely that medical students are inclined to specialize less than law students. The fact is that Harvard College provides the courses in English, history, and political science needed by students of law and does not provide the courses in anatomy, physiology, and pathology needed by students of medicine. Instead of requiring students preparing for the medical school to take courses which they do not want, the college should offer the courses which they need.

The free elective system may be a partial failure; but it is doubtful whether, apart from the professional school, a better plan has been devised. The group system is better in so far as it is a professional school within the college; it is no better as a factory for the manufacture of cultivated gentlemen. Sequences and combinations of studies in the college should be planned

which give adequate preparation for different kinds of work in life, not only for the orthodox and semi-orthodox professions, but also for business and affairs, and for such special performances as those of the Sanskrit scholar, the psychological expert, or the economic entomologist. The courses should be planned by those engaged in these callings, rather than by a college faculty, and they should be elected by the student after proper counsel, rather than forced upon him.

The boy of eighteen or nineteen either should know what he is going to do in life and give part of his time to direct preparation, or he should have a working hypothesis. The professions differ in their demands. Medicine and engineering require manual dexterity and much special information; they should be begun in good season. Law and theology are less exacting of special training; a medical or engineering course would not be a bad preparation for the bar or the church, but the converse is not true. A lawyer who becomes a university president may not unnaturally fancy that the preparation suited to a lawyer would also be fit for the physician or engineer. But when he says:

Many professors of medicine, on the other hand, feel strongly that a student should enter their schools with at least a rudimentary knowledge of those sciences, like chemistry, biology, and physiology, that are interwoven with medical studies; and they appear to attach greater weight to this than to his natural capacity or general attainments,

one wonders where those professors of medicine are who attach greater weight to rudimentary knowledge of certain sciences than to natural capacity, and whether any one holds that natural capacity precludes scientific training or conversely.

The special training of a group or professional course is not its only advantage. An expert Sanskrit scholar is better fitted to become an entomologist than an amateur who has studied a little of everything. Any kind of an apperceptive mass—to use the slang of psychology—is better than none at all. The Columbia College faculty in requiring every freshman to take six or seven studies unrelated to one another and largely unrelated to his past or future studies prescribes a method which not one member of the faculty would be so foolish as to adopt in his own work. The

collective unwisdom of a college faculty is not often exceeded by an individual student. Nor, it may be added, is the skill of a faculty in devising restrictive regulations equal to the ingenuity of the student in dodging them. As Mr. Eliot has recently said, while the word "must" may be heard hereafter more frequently at Cambridge, "I feel a very strong confidence in the ability of the youths that come to Harvard College to take that word with apparent submissiveness, but without allowing it to have any inconvenient effects on the individual."

It is doubtless true that students should not spend four years in electing elementary courses; it is well to persuade them and it may be desirable to compel them to do a certain amount of consistent work in some direction. The problem is largely social rather than educational; it is not serious in the colleges of the great state universities. They have all sorts of programs and curricula; but as a rule the student does his work because it is of concern to him. He has a major subject; he has already begun, or will take up in a year or two, agriculture, medicine, engineering, or some other life-work, and in the meanwhile he is preparing for it. The air of the place is saturated with honest work. If these young men and women are crude, it is because their homes are but a generation from the frontier, not because their work in college is real. They not only learn more, but make more progress in polite manners and broadening interests than do the boys in the colleges of the Atlantic seaboard.

Before the section of education of the American Association for the Advancement of Science a year ago, addresses were made by Professor Royce and Professor Tufts on "The American College and Life," which emphasized the need of giving reality to the work of college students by breaking down the artificial barriers between culture and professional work. Professor Tufts discussed the importance of a "reconstruction of the college ideal of liberal culture . . . by a greater introduction of the vocational element and spirit into college work." Professor Royce said:

Let us seek to assimilate college work more rather than less to that sort and grade of professional work which calls out a young man's energies

just because he feels that in such work something is at stake that is, for him, personally momentous. . . . Let us beware of those theorists who, in the name of what they call the American College, want to sunder afresh what the whole course of our modern American development has wisely tended to join, namely, teaching and investigation, the more technical training and the more general cultivation of our youth, as well as the graduate and the undergraduate types of study. I should abhor the name college if this mere name ever led us into such a backward course as some are now advocating.

Our ideas of culture are inherited, primitive, and conventional. There is a hierarchy of those who wear celluloid collars, those with linen collars, and those with non-detachable collars. Each class looks down on that below it; but scarcely considers what the wearing of a collar symbolizes. He carries a non-detachable collar who believes that American college students must be forced "to study a little of everything, for if not there is no certainty that they will be broadly cultivated." There are various kinds of culture nowadays—microbes propagating in gelatine, turnips with twenty tons of manure to the acre, and boys at Harvard studying a little of everything.

As a matter of fact boys at Harvard may be compelled to take all sorts of courses and even to be coached for examinations on them, but they do not of necessity study at all. They react normally to the futility of the scheme. There are many kinds of boys in a college community: grinds and sports, scholars and entrepreneurs. One difficulty is that they divide themselves into social cliques when they ought to mix, and are mixed in the courses when they ought to be grouped with reference to their abilities, interests, and future work.

The years from eighteen to twenty-five are precious beyond all measure. A boy of eighteen is the rawest of material; within seven years the pig-iron must become steel and the blade must get its finest edge or it will never cut deep. But we bookmen must remember that words and books and scholarship are not the only things in the world. The pen may be mightier than the sword, but it is feeble beside the workman's tool. An Achilles who has no Homer is not therefore less great. We who talk and write have undue opportunity to exploit our own trade. If we expect others to respect our scholarship, we should in turn honor

their performance. The fundamental fault of our whole educational system is that we try to train to superficial scholarship and conventional culture those who should be learning to do their share of the world's work.

The traditions of scholarship attaching to the college are indeed somewhat threadbare. From the monastery, by way of Oxford and Cambridge, came the American College. So long as it was controlled by the clergy for the education of the clergy and the church was a real part of the life of the people, the college was vital, as are today the schools of medicine, engineering, and law. When intending lawyers and teachers—concerned like the clergymen with words, books, and traditions—became a large element among college students the scholastic curriculum was not inept. Six or eight years' study of the elements of the classical languages—scarcely ever reaching so far as reading them with ease or writing them with correctness—did not accomplish so very much in the way of broadening interests and enlarging sympathies, but it gave a good drill and a common stock of knowledge and quotations, which made for the social homogeneity of a class. Poetry and art have so completely based themselves on the classical and biblical traditions that they are in danger of waning together.

Science has in the course of the past century caused a revolution in human life. Its applications have made democracy and universal education possible by enabling one man to do what formerly required ten. Science has created new professions and has at the same time provided the economic conditions which permit large numbers to follow them and to undergo a long period of unproductive apprenticeship. The same economic conditions have permitted the wealthy and potentially idle classes to increase to a vast horde largely lacking the traditions of an aristocracy. The lower death-rate due to science is followed by a lower birth-rate. Women partly freed from manual work and childbearing can be idle, go to college, or engage in sedentary occupations. Then science has directly reformed our educational system by the new material which it has supplied and by the new method which it has made supreme.

The English and American colleges have but partially and imperfectly adjusted themselves to this new life. The ghost of the obsolescent scholastic system still hovers about the place; it is still haunted by the phantom of the gentleman who hunts over his country estate and drinks two bottles of wine for dinner, but whose son may become a curate or the proconsul of an empire. Oxford and Cambridge have, as a matter of fact, more nearly fitted themselves to the conditions of British society than have our seaboard colleges to American democracy. The B.A. may mean little more than a public-school education and three six months of residence at the university, but the young men have on the whole a high sense of honor and duty, of traditions to be maintained. In addition to the poll men, there are honor courses at the universities which are strictly special and professional—preparatory to medicine, law, politics, etc., or giving expert training in subjects such as the biological sciences or the classics. A student may devote three years to exclusive and intensive work in mathematics; and the training has proved excellent, having produced not only many of the ablest mathematicians of the last century, but great men in all departments of activity. The English system of public schools and scholarships selects for the universities a large share of the ablest and most earnest young men of the country; Oxford and Cambridge have continuously sent forth their men to lead the nation. None the less it is true that in numbers, in resources, and in educational methods they have remained nearly stationary, while the great movement in higher education in England has been the establishment and growth of the metropolitan and provincial universities. These are essentially trade schools, similar to our own state universities, and having but little in common with our country clubs of the North Atlantic states.

It is not desirable to support at public expense certain country clubs or detention hospitals in which rich boys may be segregated. The idle rich and the lazy poor we have with us always and everywhere. Colleges only contribute their share to the failure to solve a problem at present insoluble. It may be that these rich boys cost society more than they are worth; it may be that

their value is a minus quantity. They will, however, occupy a far more important place in society than others. From the vast numbers born in the cottage, there are a few who grasp "the skirts of happy chance" and live to shape a "state's decrees," but in the main those who eat at the high table of the palace are born there or in its dependencies. Thanks to heredity and opportunity combined, there are more dominant personalities, such as Mr. Theodore Roosevelt, Mr. Pierpont Morgan, and Mr. Lawrence Lowell, from this small upper class than from the working millions. Whether or not we should be better off without such men is not the question. Until opportunity can be equalized we shall have them; the college must bear its share of responsibility for what they do in the world.

These rich boys are as a rule nice boys and many of them will become leaders in their own class and in the community. The luxury to which they are inured at home does not especially hurt them in college. The difficulty is twofold—they set false standards for the boys who are not rich and they do not themselves profit greatly from their college work and life. The college community is more democratic than any other; but as an institution increases in size sets are formed, and the rich are segregated in dormitories, clubs, and fraternities. They enjoy the social life which the idle classes maintain after reaching years of discretion, and are turned in that direction rather than to ideas of useful work and service. They do not see the use of the college courses, but study as little and pay their coaches as much as may be necessary to pass examinations. The president of a large college told me that he could not consider a certain man in connection with the chair of philosophy, because he was said to have leanings toward socialism and there was too much of that kind of thing among the students already. As a matter of fact, this president probably had his eyes on his trustees rather than on his students, and there is altogether too little enthusiasm for ideal ends—wise or foolish—among our college students. On the continent they are the radicals and revolutionaries; here they are too often the premature club men.

A class endowed by the public can only be tolerated if it

performs public services. Assuming that the class will last for a time, how can it be taught its responsibilities? Not surely by the Harvard plan of studying a little of everything, but nothing concerned with work in life. Even professional football is better than amateur scholarship. Your true lover is no amateur, but a professional in deadly earnest. Each boy at Harvard, rich or poor, should have some end to which he devotes himself. Those who do not care for scholarship should be given a chance to become interested in business or politics or social affairs, or else the university should be closed to them. But many will become absorbed in scholarly work if given a chance, and this can best be offered by letting them do serious work in some direction and leading them to associate with those already interested in such work.

The plan just now adopted at Harvard of establishing residence halls for freshmen traverses all that I have written. Groups of the most immature students, likely to be classified by the amount they are prepared to pay for rooms and board and the schools from which they come, will be segregated, required to study a little of everything under the supervision of celibate masters, and told that they are entering on a "period of play." If, as is said, "the change from the life of school to that of college is too abrupt at the present day," then let us make the schoolboy more of a man, not the college student less of a man. The groups in college should be formed on a plan exactly the opposite of that proposed, social, local, and age distinctions being ignored, and the main grouping being in accordance with the aptitudes and life-interests of the students. The ideal is the zoölogical hall of the old Harvard, where apprentices of a great man and a great teacher lived together. This is told of again in the charming autobiography of Shaler. A boy from the aristocratic southern classes, with ample means and good abilities, but no fixed interests, fell into this group. There he discovered his life-work and pursued it with boundless enthusiasm. Nor did the fact that he devoted himself exclusively to professional work in natural history in college prevent him from writing Elizabethan plays in his old age. The number of men of distinc-

tion given to the world from this small Agassiz group is truly remarkable.

The president of Harvard tells us that the engineering student "labors without a groan on mathematics, which most college undergraduates shun like a pestilence," and most curiously he holds that the engineering student gets no culture from his mathematics, while the college student does, and must by force be exposed to the pestilence he shuns unless he chooses philosophy as the milder disease. If culture is "a little knowledge of everything" and "those things which ordinarily educated men around a dinner table are expected to know"—to quote again—it has little more real significance than the white shirts and black coats of these gentlemen. But surely the intangible trait that we should like to strengthen by our education is almost the reverse of this—something that makes the white shirts and gossip of the dinner table insignificant, seen at times in primitive peoples, in sea-faring and farming folk, in hereditary nobles, in scholars—a certain detachment from the here and now and the narrower self, the quality of greatness in a man. This is almost unconcerned with any kind of information, but to a limited degree comes from mastery in one's own field, from historical perspective, from appreciation of the forces of nature.

There are three things that the university would do—represented by the college, the professional schools, and the graduate faculty. Through the college it would give men broader interests and wider sympathies, through the professional schools it would teach the routine methods of practice, through the graduate faculty it would improve these methods and enlarge our knowledge. But while the partial separation of these three objects in the university has a historical explanation, it has no real justification. Every child and every man should unite continuously in his education and in his life what the university artificially separates—he should always be doing and learning to do his share of the world's work, he should try continuously to improve the methods of doing it, and he should learn to appreciate the work of others.

In our actual courses we cannot do much more than teach

efficient methods of routine work. The student can learn to do something in particular, not things in general. Hence our professional schools are on the whole more successful than our colleges or our graduate faculties. Routine research and routine scholarship can be taught in the graduate faculty, which is at present essentially a professional school for university teachers. For original research and productive scholarship we must wait for the man, or possibly search for him, give him a chance, and let him alone. But we should welcome him and give him opportunity in whatever department of the university he may be found. The right way to give a man interests that are broad and permanent is not to put him in elementary courses in all sorts of subjects, but to encourage him to learn to do well his work in life and to connect with this by natural associations the larger world in which he may live. Fortunately no president and no university can confine culture to the college, professional work to the professional school, and research work to the graduate school. Each will be found everywhere according to the measure of those who teach and those who learn.

The courses intended to impart "a little knowledge of everything" should, we are informed, be lecture courses by the leading men in the department, supplemented by drill from subordinates. In my opinion this is exactly the wrong use of lecture courses. Books and small classes should be used for elementary instruction. Lectures may be needed for special work not to be found in books and are useful as emotional exercises. When used for the latter purpose, the student should not be quizzed or examined on them, but can properly be credited toward his degree for the number of hours he sits in the lecture-room.

Futile and somewhat anti-moral is the plan proposed of trying to improve scholarship by persuading students to compete for class rank. We are told that "the free elective system in college has reduced the spirit of competition in scholarship to a minimum," and that "there is a close analogy between outdoor sports and those indoor studies which are pursued for intellectual development, especially in regard to the question of stimulus by competition." As a matter of fact, men pull together in a boat

for the glory of their college; the man who plays for his own oar or hand is not esteemed there or elsewhere. There is some excuse for the student's opinion that "C" is the gentleman's grade. To try to make dull and profitless work interesting by competition puts the smell before the automobile.

This does not mean that competition is not a factor of immense importance in life; or that it is out of place in the university. When the best men graduating from the medical school receive the hospital appointments, and the best men in the engineering school find big jobs waiting for them, it is a powerful stimulus to good work. When the first and second wranglers at Cambridge have been assured of fellowships which may be worth \$50,000, the attainment has been eagerly sought and highly honored. It should be noted, however, that Cambridge has this year abandoned the ranking in the mathematical tripos, because it was regarded as on the whole injurious to scholarship. If the men who do the best scholarly work in college are properly rewarded for it during their course, on graduation, and in after-life, their scholarship will be respected even by those who are not scholars.

A proper way to encourage students to do good work is to credit them for the quality of their work as well as for the number of hours of class work which they attend. The Harvard plan of letting the same number of courses be taken either in three or in four years does not accomplish this. The student may do work of the same amount and quality in a year whether he attends ten or thirty hours of class work. But if the points for the degree are weighted as well as counted the able student or the diligent student will make more rapid progress. If he can do in two or three years the work for which the poorer student requires four years, there is no reason why he should not go forward to the professional or graduate school. It would also be just and a proper stimulus to let good students pay lower and poor students higher fees in proportion to the quality of their work. The good students who profit themselves and contribute to a better spirit in the institution should receive a larger part of the subsidy contributed for college education, while the stu-

dents who learn but little and may be a public nuisance should not be supported at college at public expense.

But the best reward for scholarly work is adequate recognition of the work as preparation for a career in life. At Columbia University a man takes his Doctor's degree at the average age of 27 years. He is fortunate if he receives immediately an instructorship at \$1,000 a year; the increments of salary are \$100 a year for ten years, so that at the age of 37 he receives a salary of \$2,000. In a commercial community the imagination is not stirred by such figures. The university is a parasite on the scholarly impulse instead of a stimulus to it.

The first need of our universities and colleges is great men for teachers. In order that the best men may be drawn to the academic career, it must be attractive and honorable. The professorship was inherited by us as a high office which is now being lowered. Professors and scholars are not sufficiently free or sufficiently well paid, so there is a lack of men who deserve to be highly rewarded, and we are in danger of sliding down the lines of a vicious spiral, until we reach the stage where the professor and his scholarship are not respected because they are not respectable.

I should myself prefer to see the salaries, earnings, and conveyings of others cut down rather than to have the salaries of professors greatly increased. When a criminal lawyer—to use the more inclusive term for corporation lawyer—receives a single fee of \$800,000, our civilization is obviously complicated. Every professor who is as able as this lawyer and who does work more important for society cannot be paid a million dollars a year. But neither is it necessary to pay him so little that he cannot do his work or educate his children. I recently excused myself somewhat awkwardly for not greeting promptly the wife of a colleague by saying that men could not be expected to recognize women because they changed their frocks. She replied: "The wives of professors don't." It is better to have wit than frocks; but in the long run they are likely to be found together. The first step of a really great university presi-

dent would be to refuse to accept a larger salary than is paid to the professors.

The second step would be to make himself responsible to the faculty instead of holding each professor responsible to him. The bureaucratic or department-store system of university control is the disease which is now serious and may become fatal. This subjection of the individual to the machinery of administration and to the rack wage, is but an invasion of the university by methods in business and in politics from which the whole country suffers. We may hope that it is only a temporary incident in the growth of material complexity beyond the powers of moral and intellectual control, and that man may soon regain his seat in the saddle. Certainly Harvard has led the way. It has adopted a scale of salaries independent of superficial supply and demand, and has placed them outside the influence of intrigue and favoritism. The bureaucratic system is less dominant than elsewhere. And it has its reward; for I find in an objective study of the distribution of the scientific men of the country that no less than one-fifth of those most eminent are here.

It has been said more than once that the college is in danger of being crushed between the upper millstone of the professional school and the nether millstone of the secondary school; those who have used this simile do not appear to realize that this is the way fine flour is made. The trouble with our educational system is that the college has not only exploited its frivolous amateurism and its futile scholasticism at home, but it has imposed them on the high school and even on the grades. When we have high schools fit for the people and professional schools of the right sort, the colleges will be molded into proper shape.

President Lowell closed his inaugural address with the words:

It is said that if the temperature of the ocean were raised the water would expand until the floods covered the dry land; and if we can increase the intellectual ambition of college students the whole face of the country will be changed. When the young men shall see visions, the dreams of old men will come true.

If the temperature of the ocean were raised sufficiently, Cambridge and its university would be submerged, while the great

continent with its state universities would stand untouched. But if the intellectual ambition is sound and the visions are sane, Harvard College can be saved.

I trust that I have not exceeded the privileges proper to a guest or the freedom allowed by an after-dinner address. Those men and those institutions which are too great for compliment are still subject to honest criticism. It would be impertinent for me to praise Harvard University and its leaders. Harvard stands apart from and above all our other universities, secure in its past and in its future, one of the great contributions made by America to the civilization of the world.